

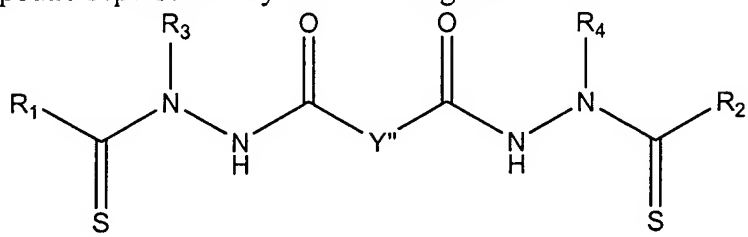
**Amendments to the Claims**

Please cancel Claims 1-125. Please add new Claims 126-149. The Claim Listing below will replace all prior versions of the claims in the application:

**Claim Listing**

1. - 125. (Cancelled)

126. (New) A compound represented by the following structural formula:



or a physiologically acceptable salt thereof, wherein:

$\text{Y}''$  is a covalent bond or  $-\text{CH}_2-$ ;

$\text{R}_1$  and  $\text{R}_2$  are each a C3-C8 substituted or unsubstituted cyclic aliphatic group; and

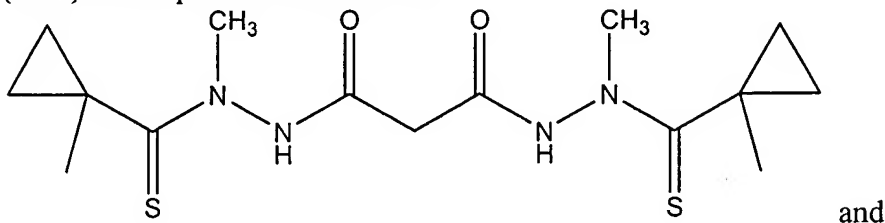
$\text{R}_3$  and  $\text{R}_4$  are a substituted or unsubstituted lower alkyl group.

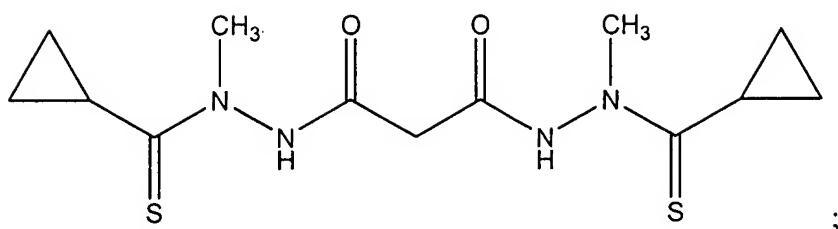
127. (New) The compound of Claim 126 wherein  $\text{R}_1$  and  $\text{R}_2$  are the same and  $\text{R}_3$  and  $\text{R}_4$  are the same.

128. (New) The compound of Claim 127 wherein  $\text{R}_3$  and  $\text{R}_4$  are methyl.

129. (New) The compound of Claim 128 wherein  $\text{Y}''$  is  $-\text{CH}_2-$ .

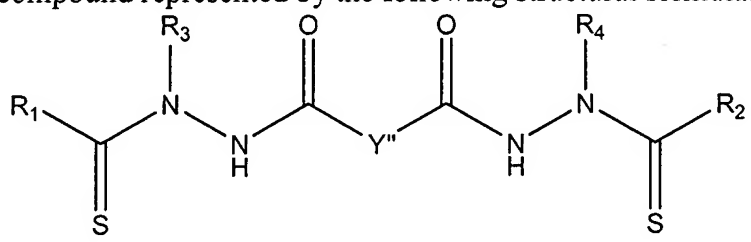
130. (New) A compound selected from:





or a physiologically acceptable salt thereof.

131. (New) A pharmaceutical composition comprising a pharmaceutically acceptable carrier or diluent and a compound represented by the following structural formula:



or a physiologically acceptable salt thereof, wherein:

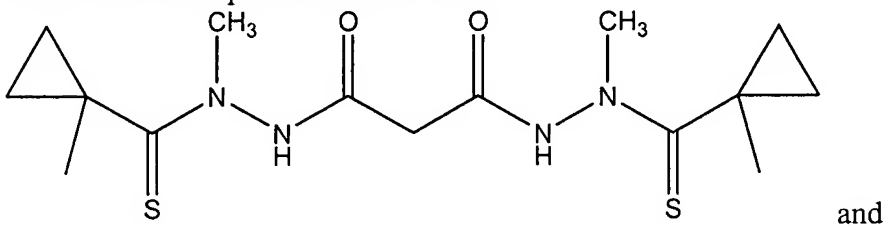
Y'' is a covalent bond or -CH<sub>2</sub>-;

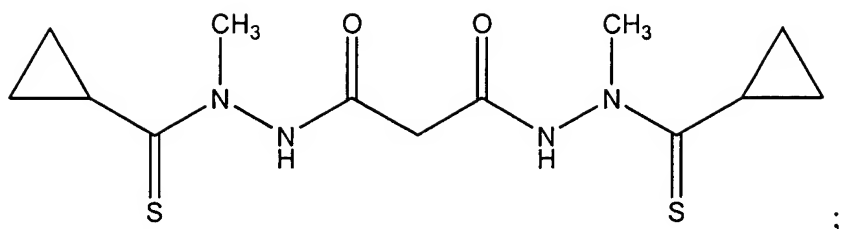
R<sub>1</sub> and R<sub>2</sub> are each a C3-C8 substituted or unsubstituted cyclic aliphatic group; and

R<sub>3</sub> and R<sub>4</sub> are a substituted or unsubstituted lower alkyl group.

132. (New) The pharmaceutical composition of Claim 131 wherein R<sub>1</sub> and R<sub>2</sub> are the same and R<sub>3</sub> and R<sub>4</sub> are the same.
133. (New) The pharmaceutical composition of Claim 132 wherein R<sub>3</sub> and R<sub>4</sub> are methyl.
134. (New) The pharmaceutical composition of Claim 133 wherein Y'' is -CH<sub>2</sub>-.

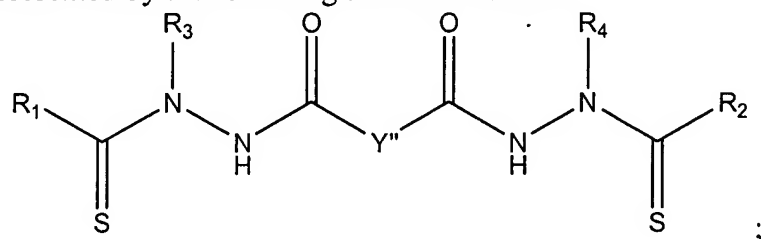
135. (New) A pharmaceutical composition comprising a pharmaceutically acceptable carrier or diluent and a compound selected from:





or a physiologically acceptable salt thereof.

136. (New) A method of treating a subject with cancer, said method comprising administering to the subject an effective amount of taxol or a taxol analog and an effective amount of a compound represented by the following structural formula:



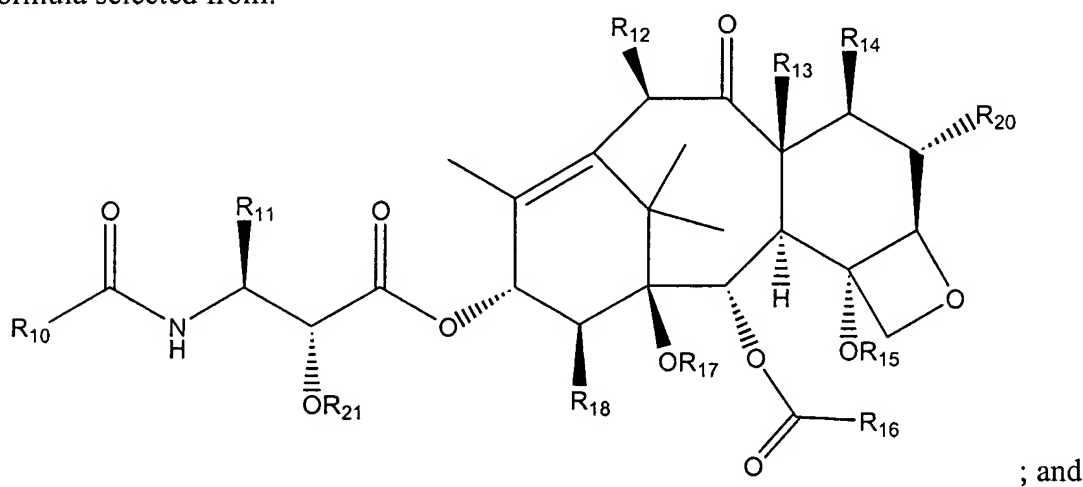
or a physiologically acceptable salt thereof, wherein:

Y'' is a covalent bond or -CH<sub>2</sub>-;

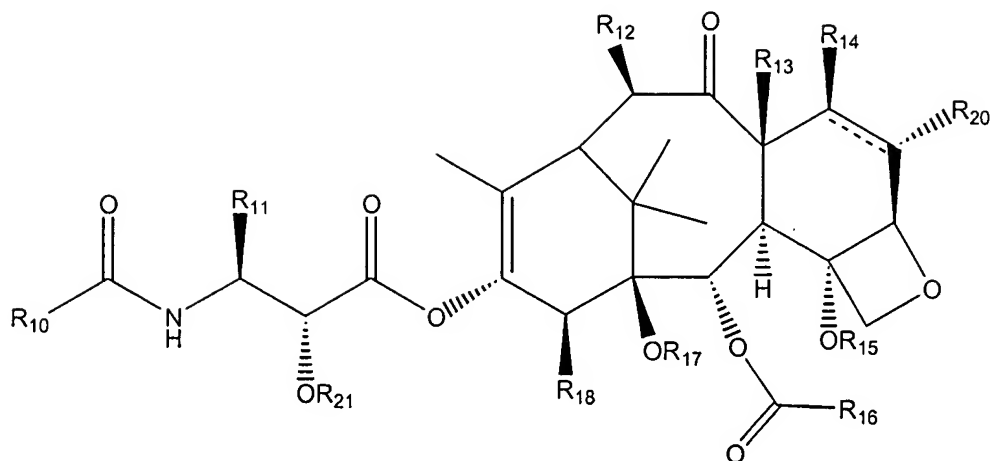
R<sub>1</sub> and R<sub>2</sub> are each a C3-C8 substituted or unsubstituted cyclic aliphatic group; and

R<sub>3</sub> and R<sub>4</sub> are a substituted or unsubstituted lower alkyl group.

137. (New) The method of Claim 136 wherein the taxol analog is represented by a structural formula selected from:



; and



wherein:

- R<sub>10</sub> is a lower alkyl group, a substituted lower alkyl group, a phenyl group, a substituted phenyl group, -SR<sub>19</sub>, -NHR<sub>19</sub> or -OR<sub>19</sub>;
- R<sub>11</sub> is a lower alkyl group, a substituted lower alkyl group, an aryl group or a substituted aryl group;
- R<sub>12</sub> is -H, -OH, lower alkyl, substituted lower alkyl, lower alkoxy, substituted lower alkoxy, -O-C(O)-(lower alkyl), -O-C(O)-(substituted lower alkyl), -O-CH<sub>2</sub>-O-(lower alkyl) or -S-CH<sub>2</sub>-O-(lower alkyl);
- R<sub>13</sub> is -H, -CH<sub>3</sub>, or, taken together with R<sub>14</sub>, is -CH<sub>2</sub>-;
- R<sub>14</sub> is -H, -OH, lower alkoxy, -O-C(O)-(lower alkyl), substituted lower alkoxy, -O-C(O)-(substituted lower alkyl), -O-CH<sub>2</sub>-O-P(O)(OH)<sub>2</sub>, -O-CH<sub>2</sub>-O-(lower alkyl), -O-CH<sub>2</sub>-S-(lower alkyl) or, taken together with R<sub>20</sub>, is a double bond;
- R<sub>15</sub> -H, lower acyl, lower alkyl, substituted lower alkyl, alkoxymethyl, alkthiomethyl, -OC(O)-O(lower alkyl), -OC(O)-O(substituted lower alkyl), -OC(O)-NH(lower alkyl) or -OC(O)-NH(substituted lower alkyl);
- R<sub>16</sub> is phenyl or substituted phenyl;
- R<sub>17</sub> is -H, lower acyl, substituted lower acyl, lower alkyl, substituted, lower alkyl, (lower alkoxy)methyl or (lower alkyl)thiomethyl;
- R<sub>18</sub> -H, -CH<sub>3</sub> or, taken together with R<sub>17</sub> and the carbon atoms to which R<sub>17</sub> and R<sub>18</sub> are bonded, is a five or six membered a non-aromatic heterocyclic ring;
- R<sub>19</sub> is a lower alkyl group, a substituted lower alkyl group, a phenyl group, or a substituted phenyl group;
- R<sub>20</sub> is -H or a halogen; and
- R<sub>21</sub> is -H, lower alkyl, substituted lower alkyl, lower acyl or substituted lower acyl.

138. (New) The method of Claim 136 wherein:

$R_{10}$  is phenyl, *tert*-butoxy,  $-S-CH_2-CH-(CH_3)_2$ ,  $-S-CH(CH_3)_3$ ,  $-S-(CH_2)_3CH_3$ ,  
 $-O-CH(CH_3)_3$ ,  $-NH-CH(CH_3)_3$ ,  $-CH=C(CH_3)_2$  or *para*-chlorophenyl;

$R_{11}$  is phenyl,  $(CH_3)_2CHCH_2-$ , 2-furanyl, cyclopropyl or *para*-toluyl;

$R_{12}$  is  $-H$ ,  $-OH$ ,  $CH_3CO-$  or  $-(CH_2)_2-N$ -morpholino;

$R_{13}$  is methyl, or,  $R_{13}$  and  $R_{14}$ , taken together, are  $-CH_2-$ ;

$R_{14}$  is  $-H$ ,  $-CH_2SCH_3$  or  $-CH_2-O-P(O)(OH)_2$ ;

$R_{15}$  is  $CH_3CO-$ ;

$R_{16}$  is phenyl;

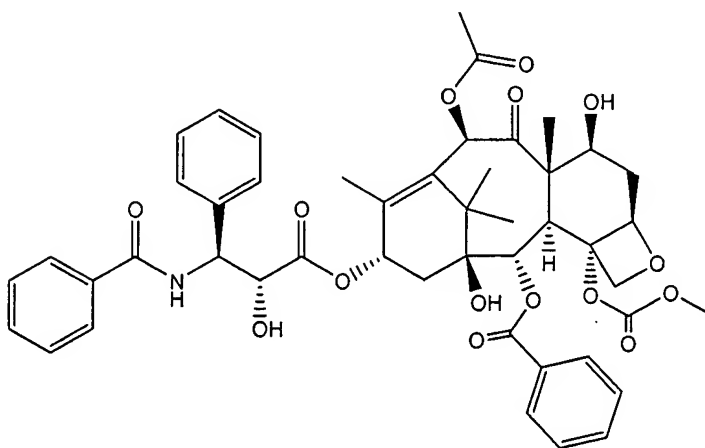
$R_{17}$   $-H$ , or,  $R_{17}$  and  $R_{18}$ , taken together, are  $-O-CO-O-$ ;

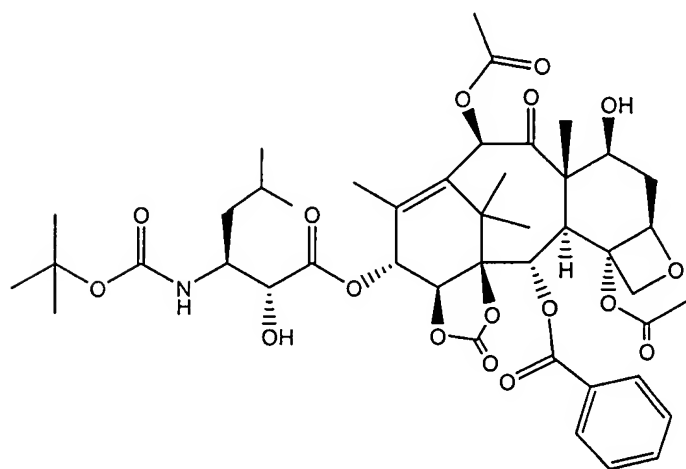
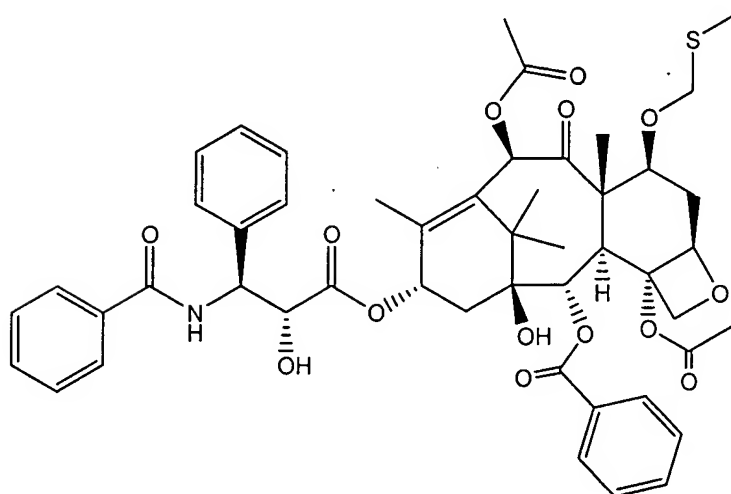
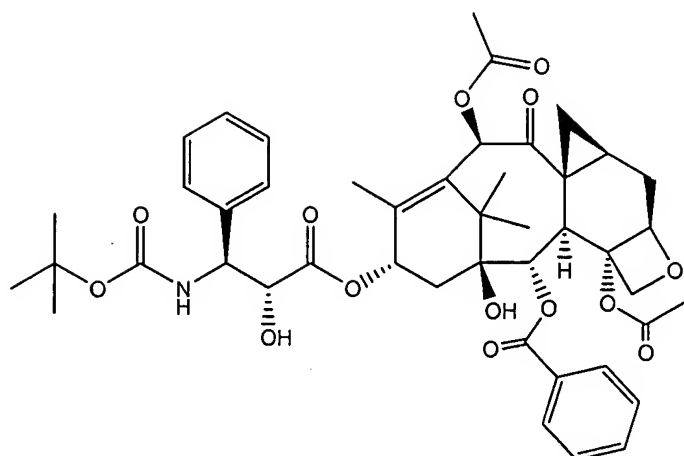
$R_{18}$  is  $-H$ ;

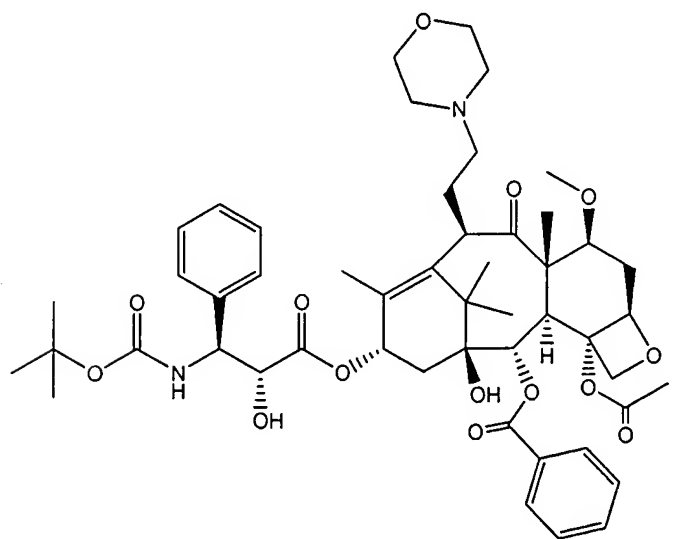
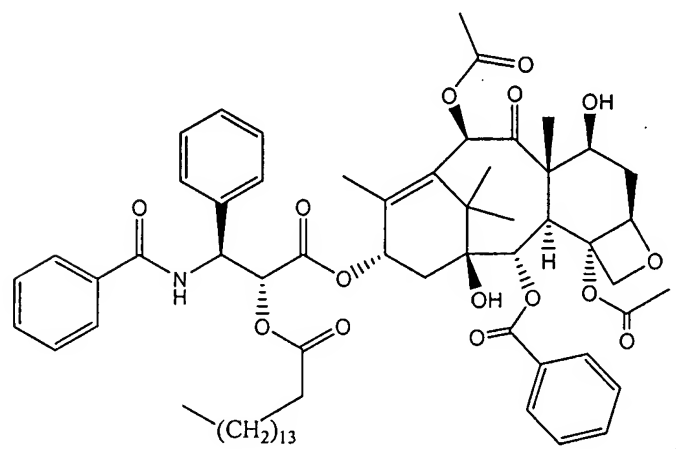
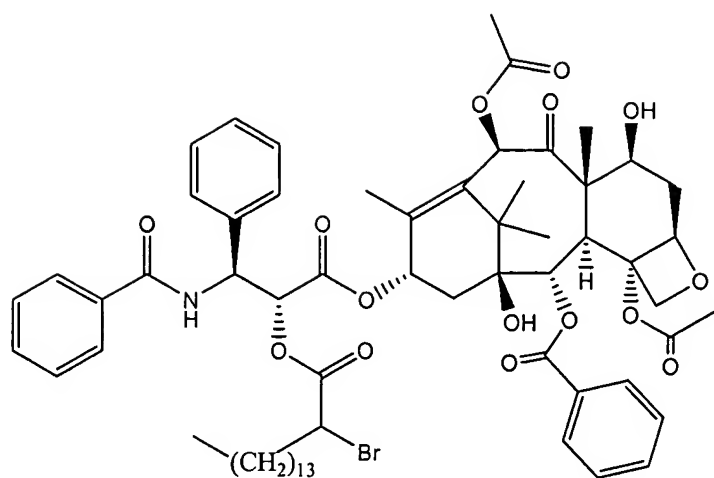
$R_{20}$  is  $-H$  or  $-F$ ; and

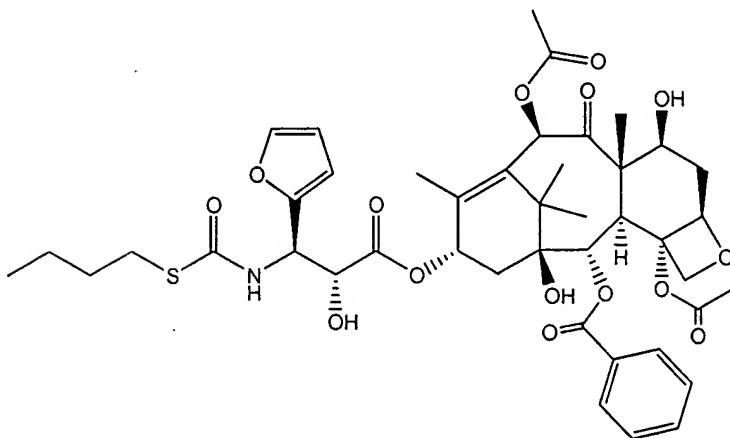
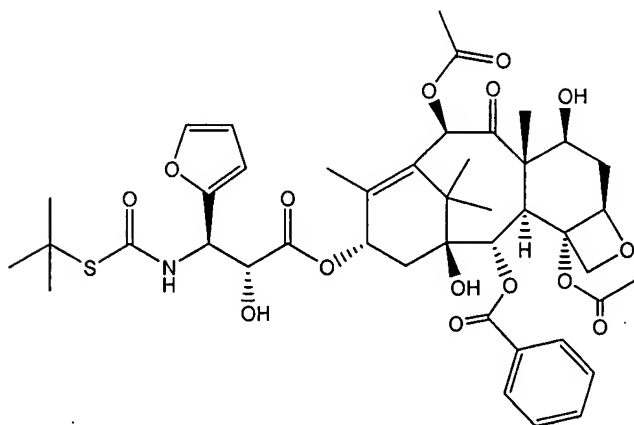
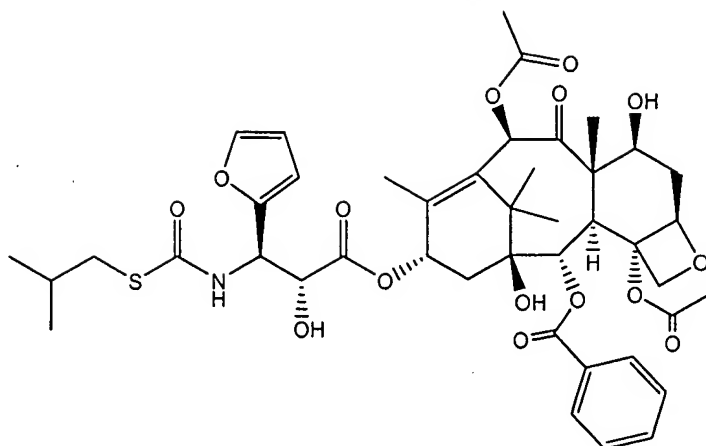
$R_{21}$  is  $-H$ ,  $-C(O)-CHBr-(CH_2)_{13}-CH_3$ ,  $-C(O)-(CH_2)_{14}-CH_3$ ,  
 $-C(O)-CH_2-CH(OH)-COOH$ ,  $-C(O)-CH_2-O-C(O)-CH_2CH(NH_2)-CONH_2$ ,  
 $-C(O)-CH_2-O-CH_2CH_2OCH_3$  or  $-C(O)-O-C(O)-CH_2CH_3$ .

139. (New) The method of Claim 136 wherein the taxol analog is selected from:

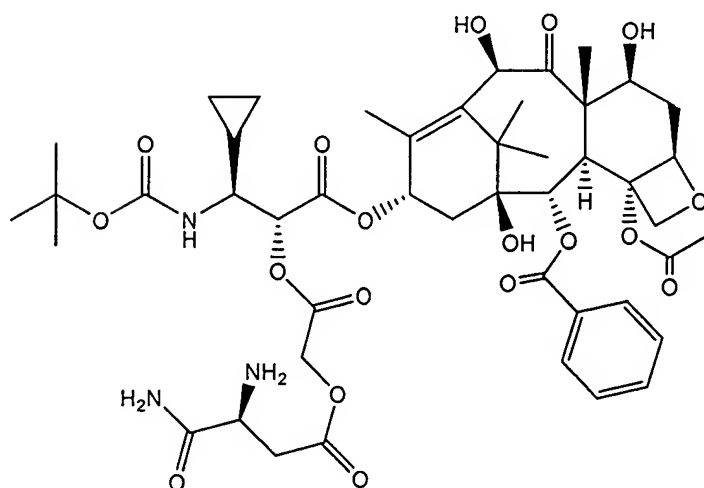
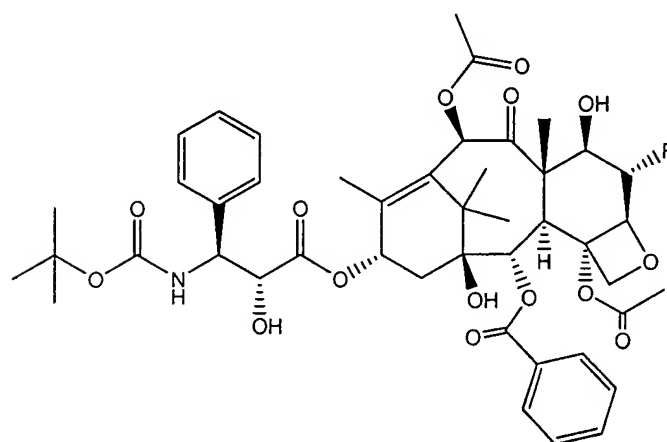
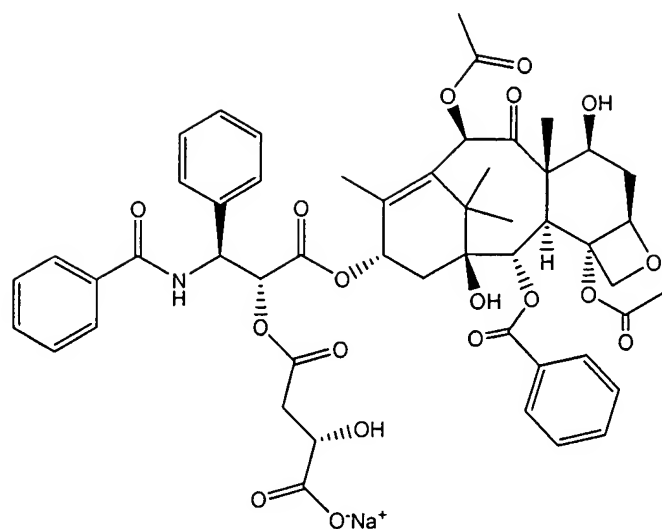


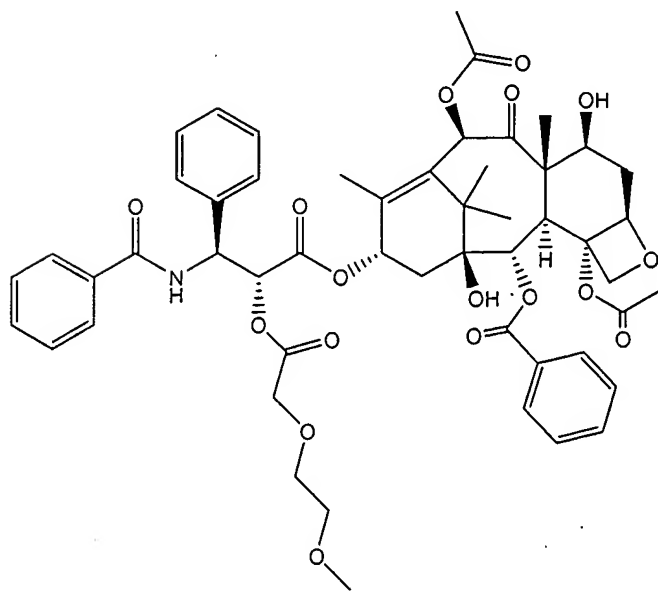
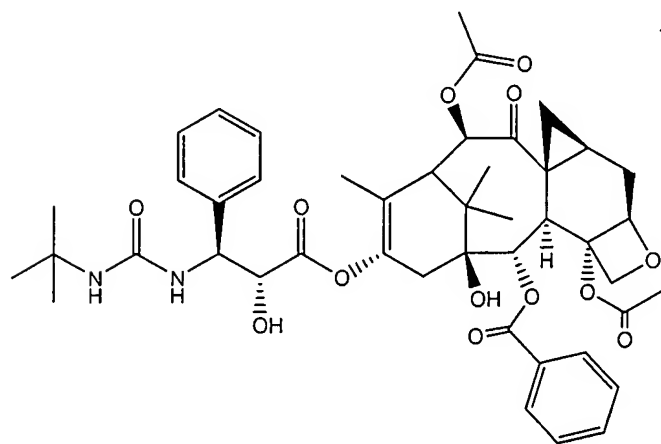
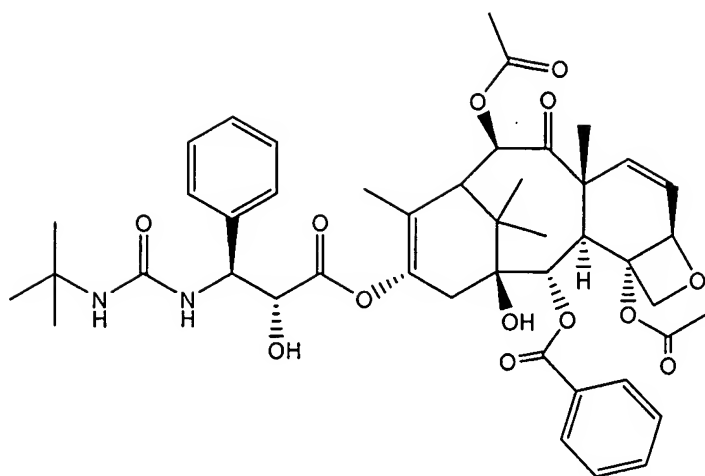


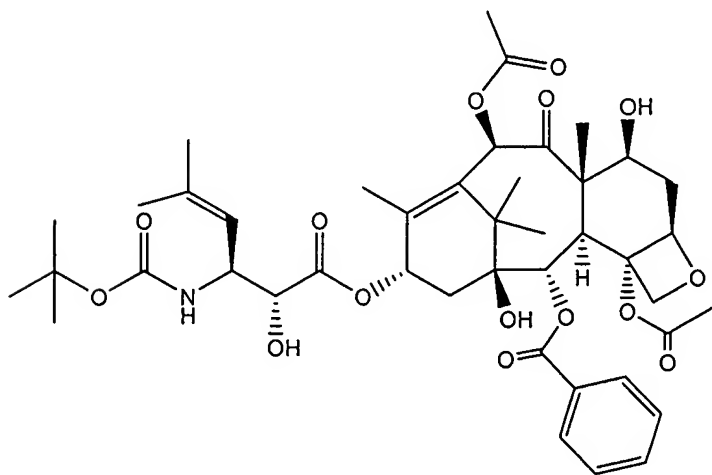
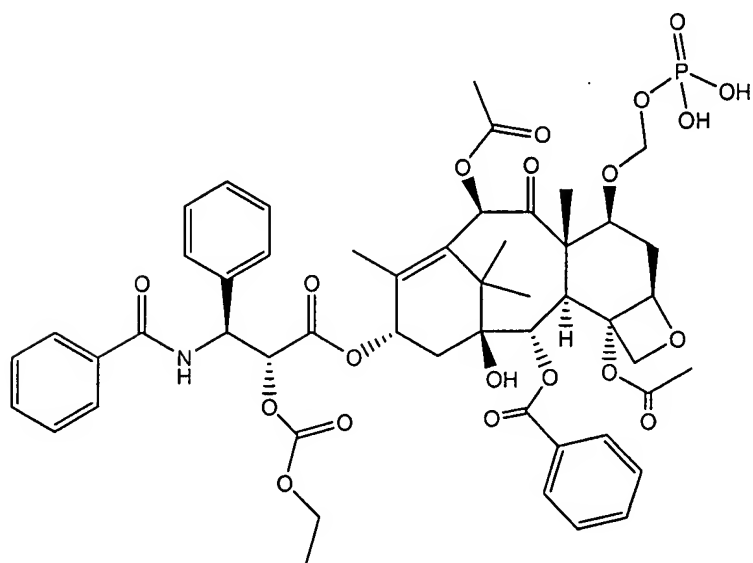
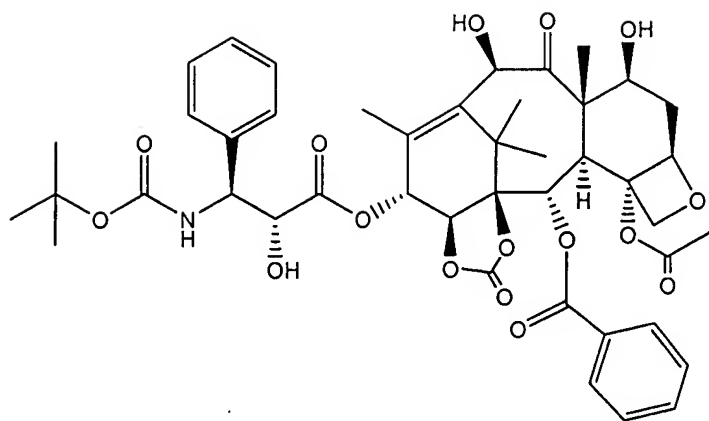


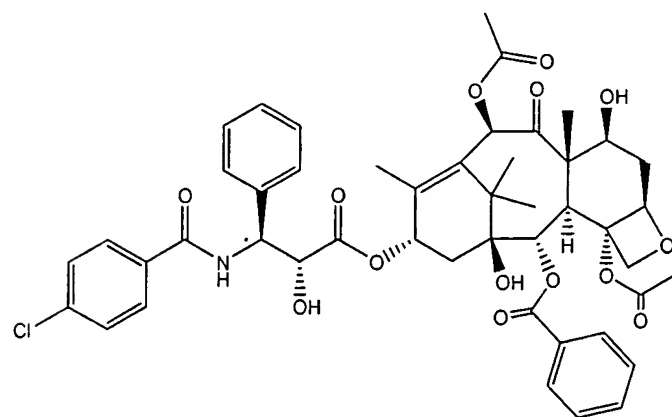
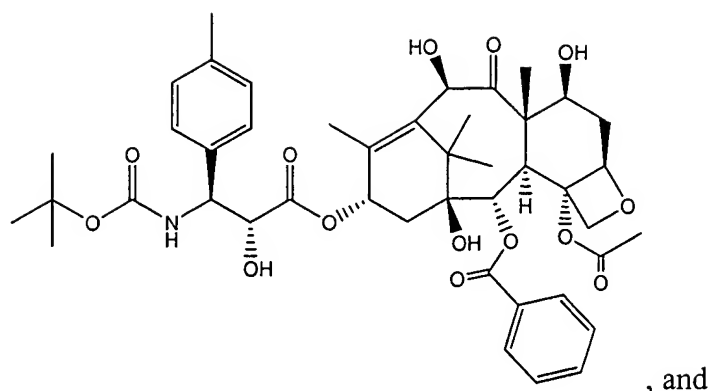






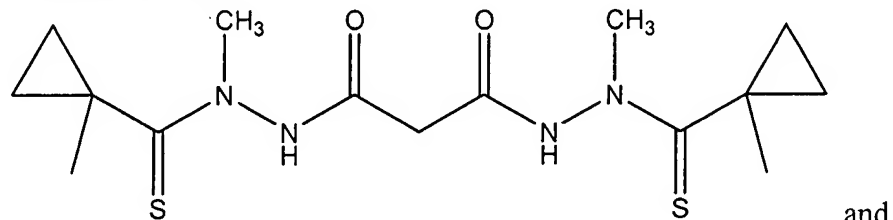




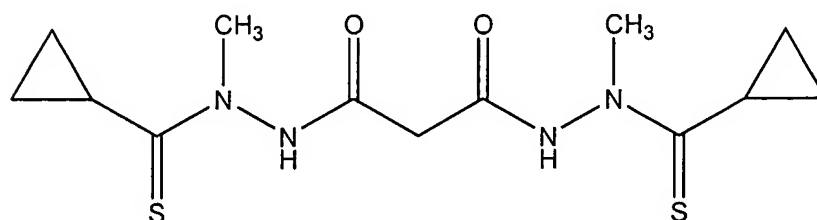


140. (New) The method of Claim 136 wherein the taxol analog is the copolymer of *N*-(2-hydroxypropyl)methacrylamide, methacryloylglycine-2-hydroxypropylamide and [2aR[2 $\alpha$ ,4 $\beta$ ,4 $\beta$ ,6 $\beta$ ,9 $\alpha$ (2R,3S),11 $\beta$ ,12 $\alpha$ ,12 $\alpha$ ,12 $\alpha$ ]]-6,12b-diacetoxy-9-[3-benzamido-2-(methacryloyl-glycyl-L-phenylalanyl-L-leucylglycyloxy)-3-phenylpropionyloxy]-12-benzoyloxy-4,11-dihydroxy-4a,8,13,13-tetramethyl-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-1H-7,11-methanocyclodeca[3,4]benz[1,2-b]oxet-5-one.
141. (New) The method of Claim 136 wherein the subject is administered taxol or taxotere.
142. (New) The method of Claim 136 wherein R<sub>1</sub> and R<sub>2</sub> are the same and R<sub>3</sub> and R<sub>4</sub> are the same.
143. (New) The method of Claim 142 wherein R<sub>3</sub> and R<sub>4</sub> are methyl.
144. (New) The method of Claim 143 wherein Y'' is -CH<sub>2</sub>-.

145. (New) A method of treating a subject with cancer, said method comprising administering to the subject an effective amount of taxol or a taxol analog and an effective amount of a compound selected from:



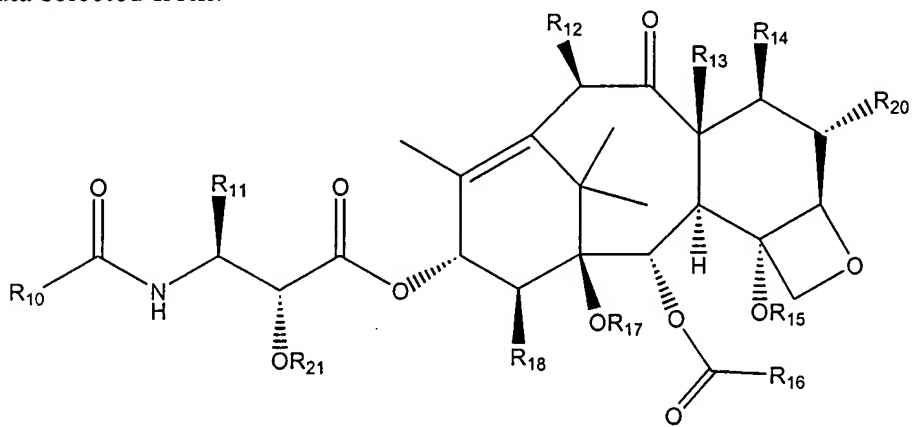
and



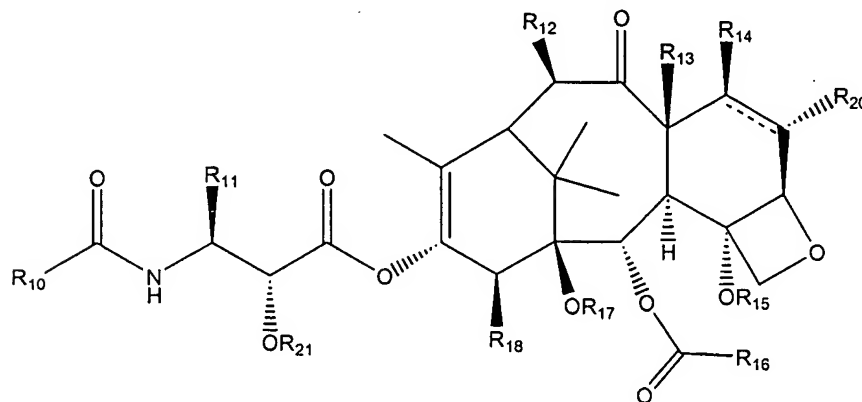
;

or a physiologically acceptable salt thereof.

146. (New) The method of Claim 145 wherein the taxol analog is represented by a structural formula selected from:



; and



wherein:

- R<sub>10</sub> is a lower alkyl group, a substituted lower alkyl group, a phenyl group, a substituted phenyl group, -SR<sub>19</sub>, -NHR<sub>19</sub> or -OR<sub>19</sub>;
- R<sub>11</sub> is a lower alkyl group, a substituted lower alkyl group, an aryl group or a substituted aryl group;
- R<sub>12</sub> is -H, -OH, lower alkyl, substituted lower alkyl, lower alkoxy, substituted lower alkoxy, -O-C(O)-(lower alkyl), -O-C(O)-(substituted lower alkyl), -O-CH<sub>2</sub>-O-(lower alkyl) or -S-CH<sub>2</sub>-O-(lower alkyl);
- R<sub>13</sub> is -H, -CH<sub>3</sub>, or, taken together with R<sub>14</sub>, is -CH<sub>2</sub>-;
- R<sub>14</sub> is -H, -OH, lower alkoxy, -O-C(O)-(lower alkyl), substituted lower alkoxy, -O-C(O)-(substituted lower alkyl), -O-CH<sub>2</sub>-O-P(O)(OH)<sub>2</sub>, -O-CH<sub>2</sub>-O-(lower alkyl), -O-CH<sub>2</sub>-S-(lower alkyl) or, taken together with R<sub>20</sub>, is a double bond;
- R<sub>15</sub> -H, lower acyl, lower alkyl, substituted lower alkyl, alkoxymethyl, alkthiomethyl, -OC(O)-O(lower alkyl), -OC(O)-O(substituted lower alkyl), -OC(O)-NH(lower alkyl) or -OC(O)-NH(substituted lower alkyl);
- R<sub>16</sub> is phenyl or substituted phenyl;
- R<sub>17</sub> is -H, lower acyl, substituted lower acyl, lower alkyl, substituted, lower alkyl, (lower alkoxy)methyl or (lower alkyl)thiomethyl;
- R<sub>18</sub> -H, -CH<sub>3</sub> or, taken together with R<sub>17</sub> and the carbon atoms to which R<sub>17</sub> and R<sub>18</sub> are bonded, is a five or six membered a non-aromatic heterocyclic ring;
- R<sub>19</sub> is a lower alkyl group, a substituted lower alkyl group, a phenyl group, or a substituted phenyl group;
- R<sub>20</sub> is -H or a halogen; and
- R<sub>21</sub> is -H, lower alkyl, substituted lower alkyl, lower acyl or substituted lower acyl.

147. (New) The method of Claim 146 wherein:

- R<sub>10</sub> is phenyl, *tert*-butoxy, -S-CH<sub>2</sub>-CH-(CH<sub>3</sub>)<sub>2</sub>, -S-CH(CH<sub>3</sub>)<sub>3</sub>, -S-(CH<sub>2</sub>)<sub>3</sub>CH<sub>3</sub>, -O-CH(CH<sub>3</sub>)<sub>3</sub>, -NH-CH(CH<sub>3</sub>)<sub>3</sub>, -CH=C(CH<sub>3</sub>)<sub>2</sub> or *para*-chlorophenyl;
- R<sub>11</sub> is phenyl, (CH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>-, -2-furanyl, cyclopropyl or *para*-toluyl;
- R<sub>12</sub> is -H, -OH, CH<sub>3</sub>CO- or -(CH<sub>2</sub>)<sub>2</sub>-*N*-morpholino;
- R<sub>13</sub> is methyl, or, R<sub>13</sub> and R<sub>14</sub>, taken together, are -CH<sub>2</sub>-;
- R<sub>14</sub> is -H, -CH<sub>2</sub>SCH<sub>3</sub> or -CH<sub>2</sub>-O-P(O)(OH)<sub>2</sub>;
- R<sub>15</sub> is CH<sub>3</sub>CO-;
- R<sub>16</sub> is phenyl;

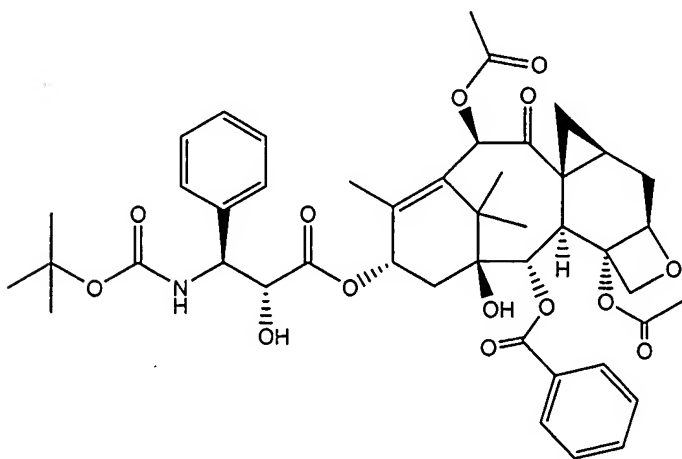
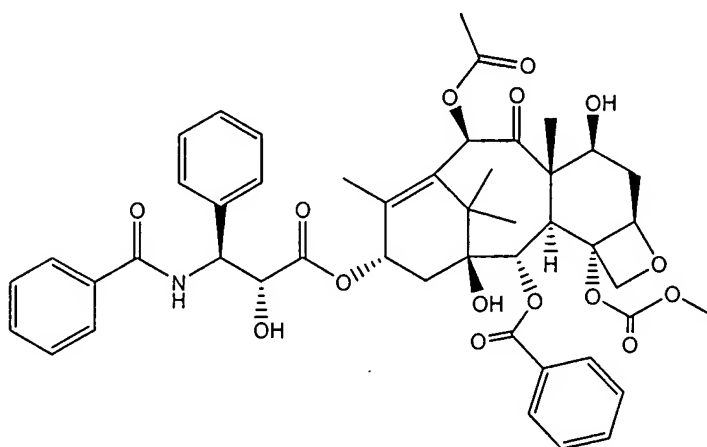
$R_{17}$  -H, or,  $R_{17}$  and  $R_{18}$ , taken together, are -O-CO-O-;

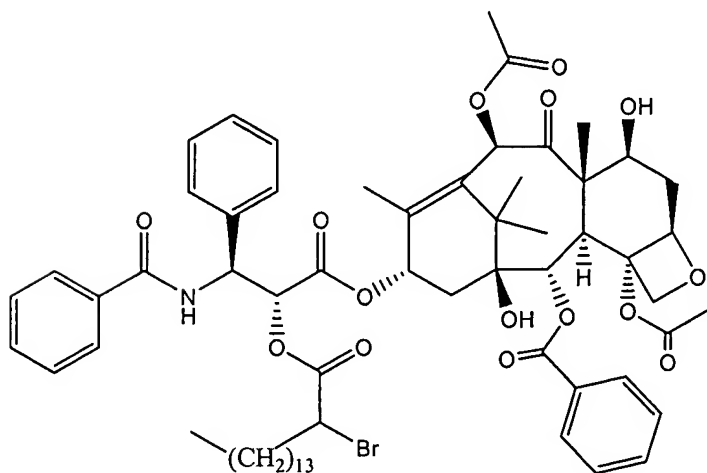
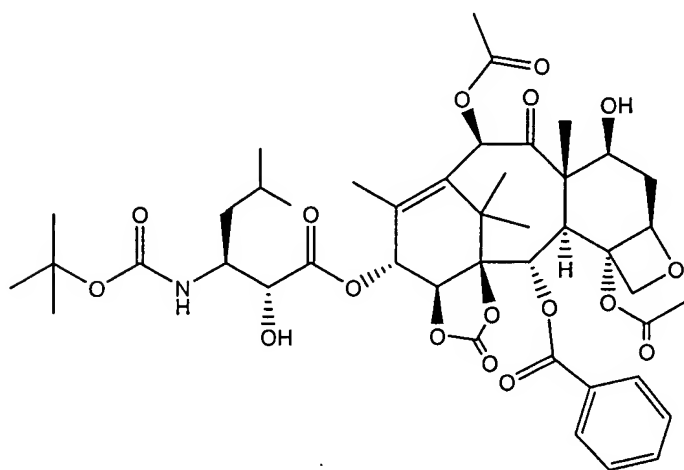
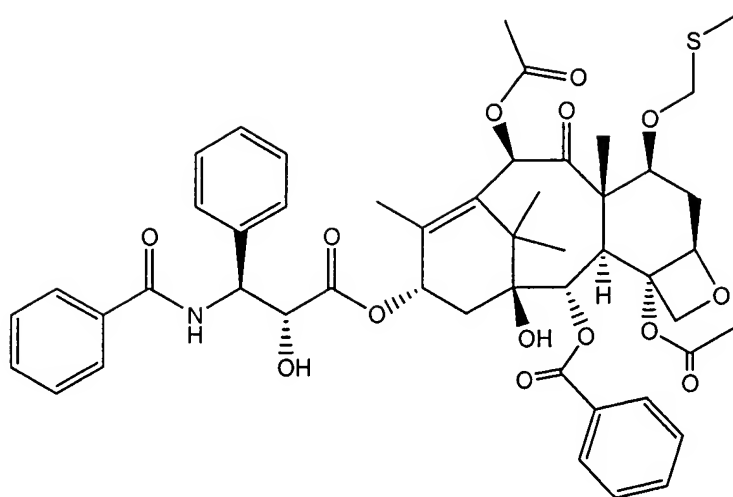
$R_{18}$  is -H;

$R_{20}$  is -H or -F; and

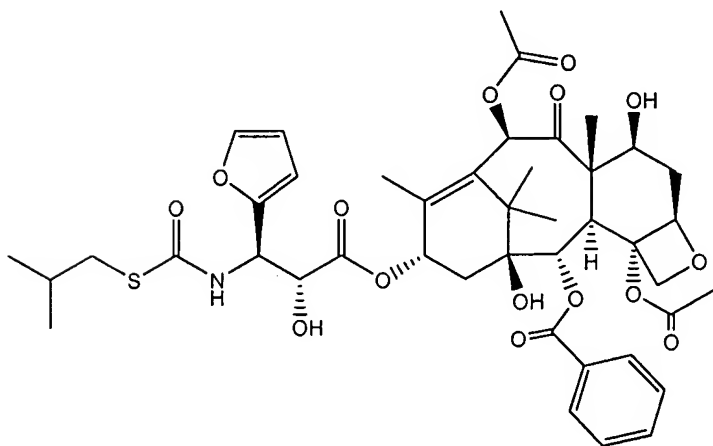
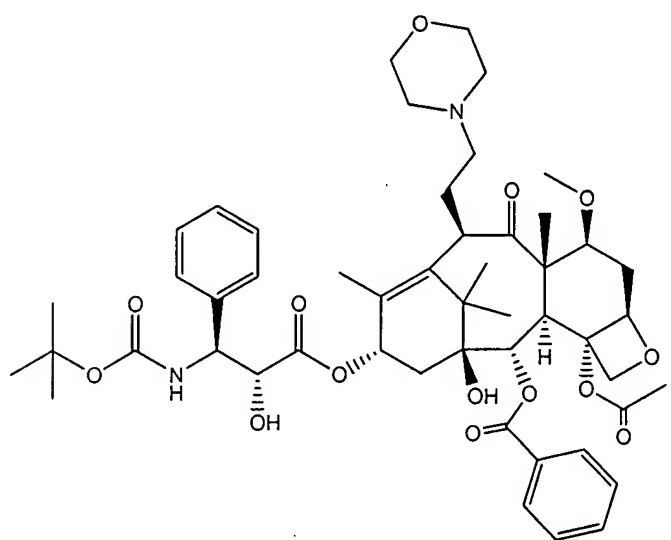
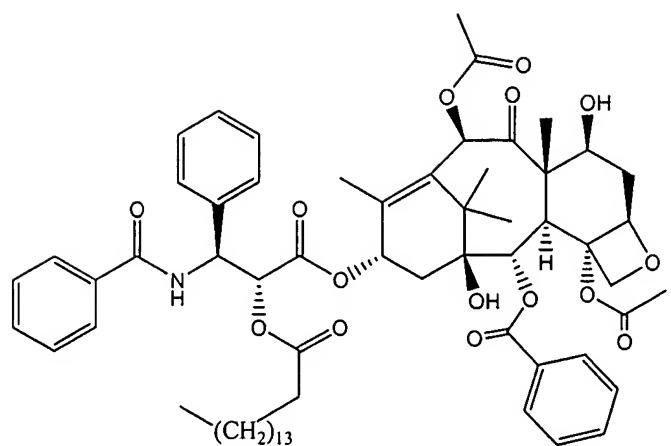
$R_{21}$  is -H, -C(O)-CHBr-(CH<sub>2</sub>)<sub>13</sub>-CH<sub>3</sub>, -C(O)-(CH<sub>2</sub>)<sub>14</sub>-CH<sub>3</sub>,  
 -C(O)-CH<sub>2</sub>-CH(OH)-COOH, -C(O)-CH<sub>2</sub>-O-C(O)-CH<sub>2</sub>CH(NH<sub>2</sub>)-CONH<sub>2</sub>,  
 -C(O)-CH<sub>2</sub>-O-CH<sub>2</sub>CH<sub>2</sub>OCH<sub>3</sub> or -C(O)-O-C(O)-CH<sub>2</sub>CH<sub>3</sub>.

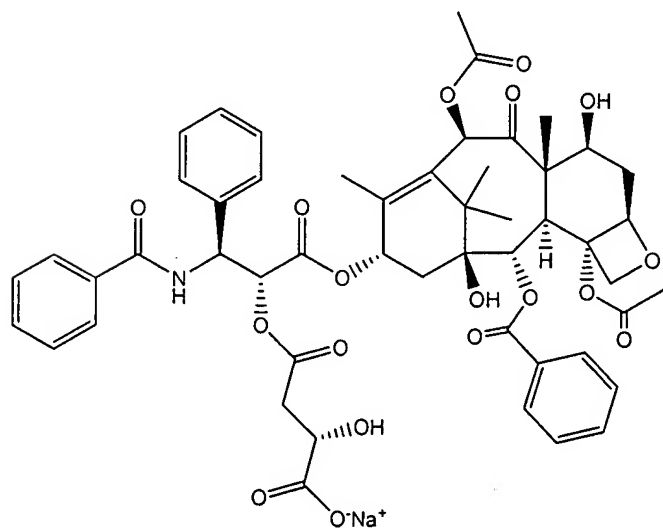
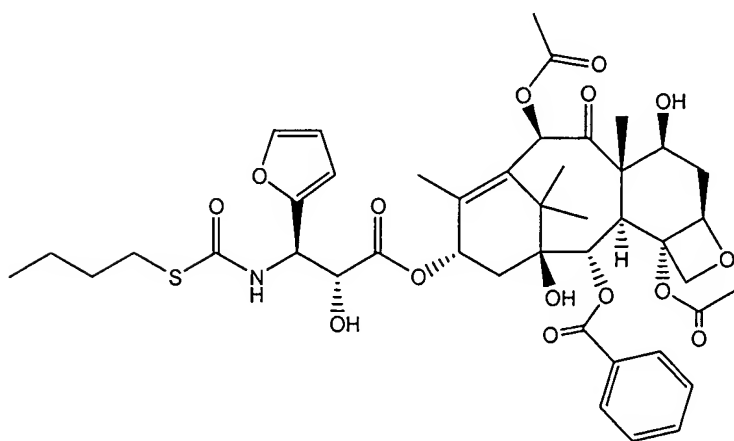
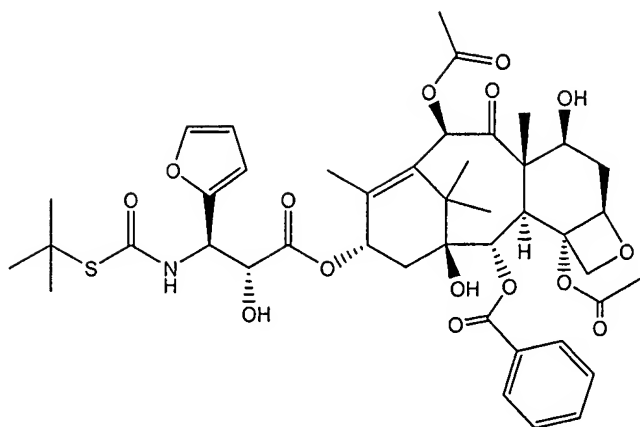
148. (New) The method of Claim 145 wherein the taxol analog is selected from:

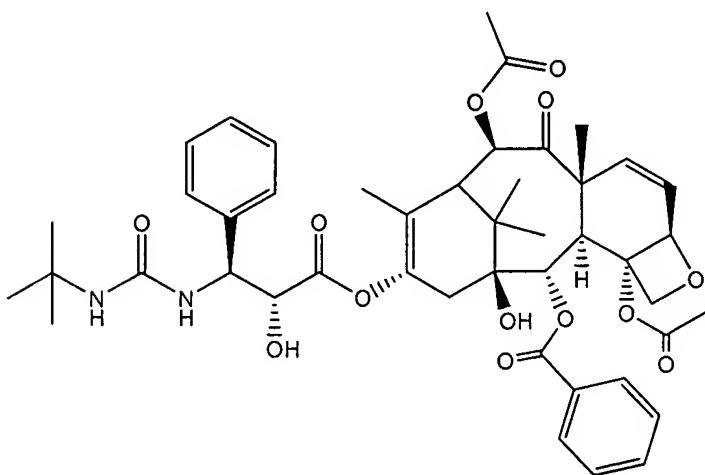
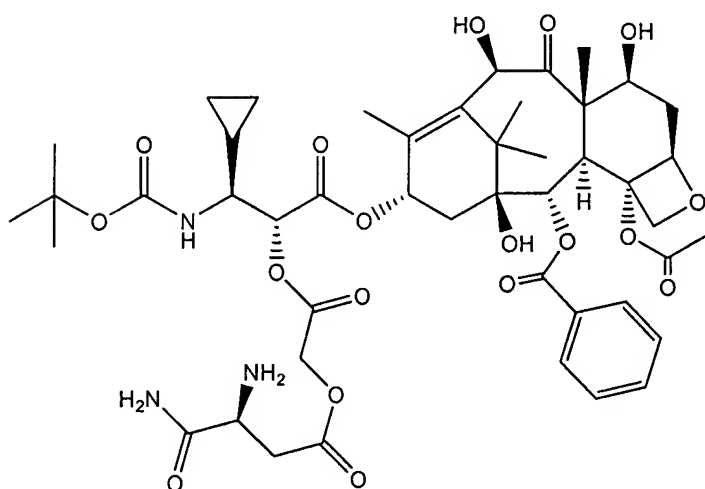
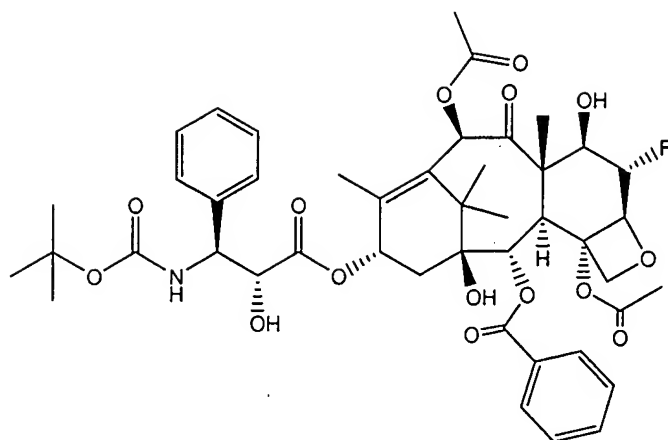


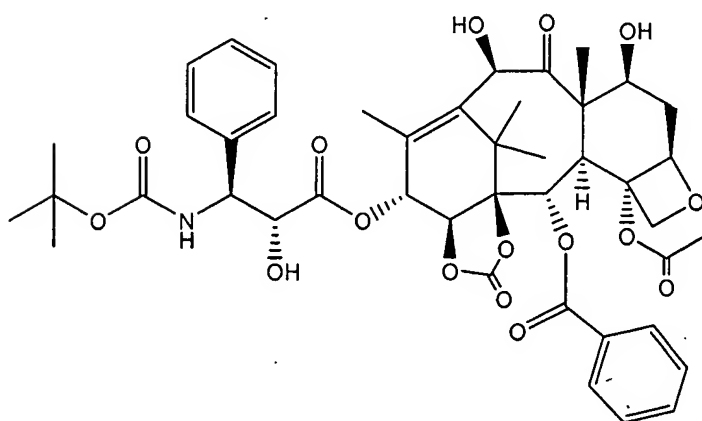
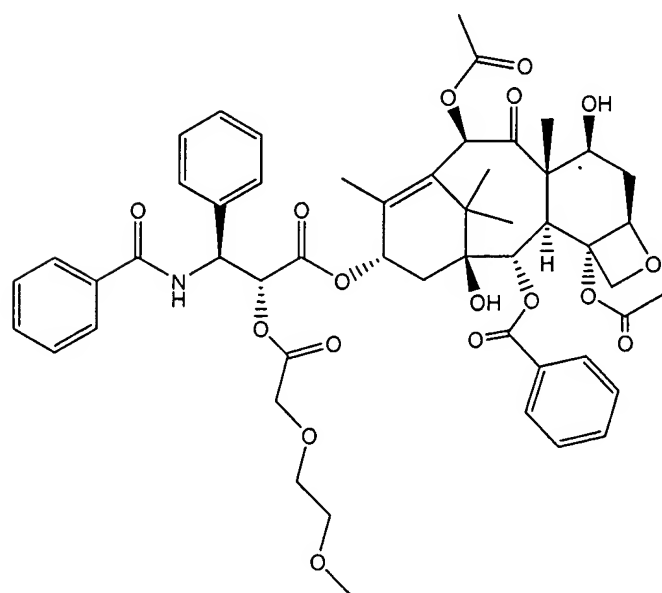
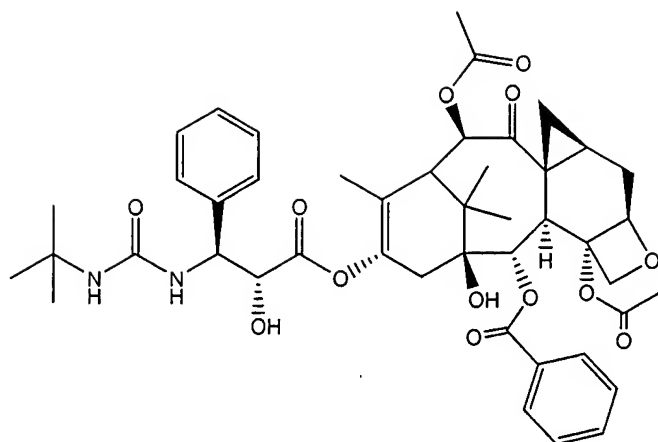


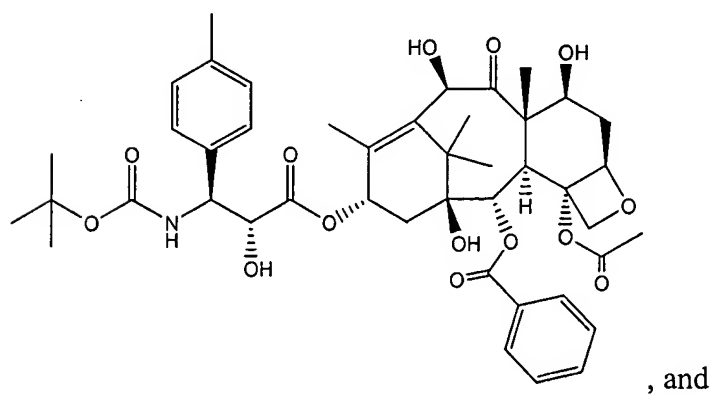
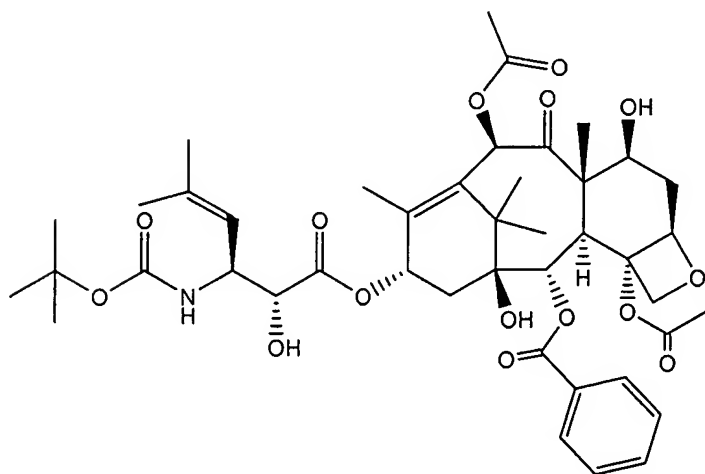
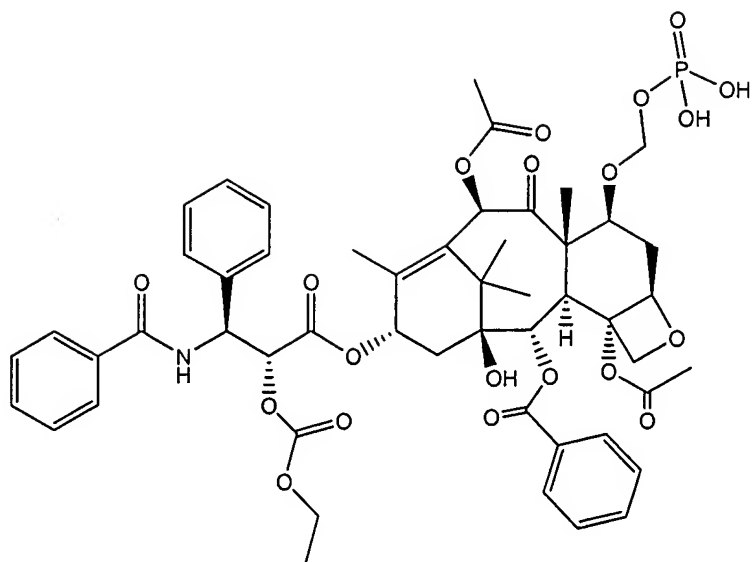


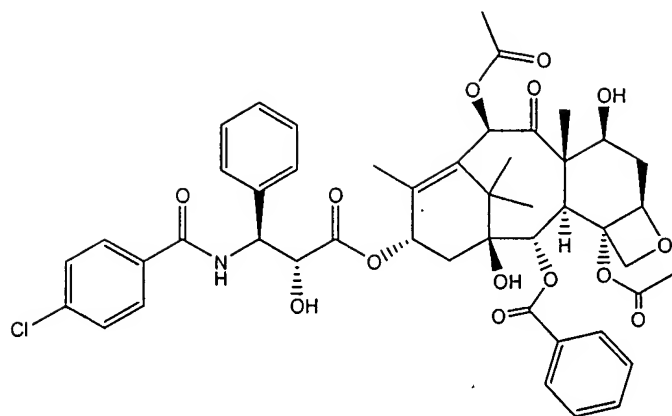












149. (New) The method of Claim 145 wherein the subject is administered taxol or taxotere.